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Seminar Report

Quality management of global rehabilitation services

Technical Resources Division
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Satellite Document

Quality management of global rehabilitation services

Seminar report - AC3 Seminar "Quality Management of Global Rehabilitation Services: Global Experiences, Innovations and Shaping Future Reform", Ouagadougou, Burkina Faso, 11-15 June 2012

Foreword

Access to rehabilitation services is a crucial public health and development issue, and ensuring the quality of these services is one of Handicap International's main goals. However, understanding how to manage the quality of rehabilitation service delivery in difficult environments calls for in-depth action-research, innovation and knowledge-sharing.

These key subject areas underpinned a best practices seminar organised for physical and functional rehabilitation professionals in Burkina Faso in June 2012. During the seminar, participants were introduced to an emerging approach to rehabilitation services management developed on our programmes in South Asia. This seminar not only enabled us to introduce this management system to other programmes, mainly those based in Francophone African countries, but also provided useful input to work being done by the Rehabilitation Advisor on the South Asia Desk. The seminar led to an analysis and re-development of the system and a revision of the indicators by a select working group that met in Nepal in 2013. Exchanges between Asia and Africa have continued and resulted in the delivery of training on the "Rehabilitation Services Management System" (RMS) in November 2013 for our team and partners in Sierra Leone.

This satellite document explains the issues, challenges and possible ways to improve our quality approach to rehabilitation activities, and will make you want to find out more about the rehabilitation services management system. In line with Handicap International's Federal Strategy, its aim is to promote comprehensive and continuous quality management of the physical and functional rehabilitation system and services on our projects.

It also takes the Unit's "Physical and functional rehabilitation" policy paper one step further by broadening the scope of our federal and rehabilitation activities.

So what are you waiting for? Get on board!

Isabelle Urseau
Head of Rehabilitation Services Unit

NB: In this document, we sometimes refer to "rehabilitation" and sometimes to "physical and functional rehabilitation". The latter is the authoritative term and the concepts relating to it are, among other things, outlined in the "Physical and functional rehabilitation" policy paper.

Introduction

1. Rehabilitation context

Global

The World Health Organization (WHO) and the World Bank estimate that people with disabilities constitute at least 15% of the world's population; therefore, one in every seven people are living with some form of a disability[1]. Given that there are at least 1 billion people worldwide who are disabled and that many more will encounter a disabling experience throughout their lifetimes, it is essential that people with disabilities are able to access health, rehabilitation and social services in all contexts.

The massive challenges of an ageing population, the increasing incidence and prevalence of chronic disabling non-communicable diseases, and the disabling effects of violence and injury are well documented[2]. Providing comprehensive rehabilitation can both prevent unnecessary disabilities and comorbidities, and ensure that people with chronic disabilities achieve their full potential and claim their rights in the community. This is supported by Article 26 – "Habilitation and Rehabilitation" – of the United Nations Convention on the Rights of Persons with Disabilities (CRPD), which calls for "appropriate measures, including through peer support, to enable persons with disabilities to attain and maintain their maximum independence, full physical, mental, social and vocational ability, and full inclusion and participation in all aspects of life"[3].

While the need for quality health care is generally well understood, there are profound limitations in the availability of post-acute services. Therefore, the emphasis of health care responses has typically been on life-saving care without equal emphasis on post-acute or chronic services. Generally, physical and functional rehabilitation is not emphasised in global health discourse, despite many recent documents, including various national and international policy instruments and the World Report on Disability, recognising that physical rehabilitation services are a necessary element of a comprehensive system. CRPD Article 26 specifically calls on countries to organise, strengthen and extend comprehensive rehabilitation services and programmes, beginning as early as possible, based on multidisciplinary assessment of individual needs and strengths, and including the provision of assistive devices and technologies[4].

Rehabilitation is defined in the World Report as "a set of measures that assist individuals who experience, or are likely to experience, disability to achieve and maintain optimal functioning in interaction with their environments"[5]. In low-income and complex contexts, physical and functional rehabilitation is particularly challenging, given human resource shortages and inadequate funding of health care in general. In these situations, rehabilitation services have evolved in unique ways. They are often strongly linked to humanitarian responses and wider disability actions, and are less connected with mainstream health care than in other settings. However, at the same time, many agencies are seeking practical solutions to the day-to-day challenges of providing rehabilitation care. They are seeking standards and guidelines, as well as adequate resources, to direct their responses to the massive challenges that lie ahead in organised, efficient ways.

Further, to meet future demands, the rehabilitation workforce requires ongoing support to strengthen and lead a future response. Both foundation training for new professionals and

ongoing development of existing professionals, in conjunction with strengthened policies and the overall sector, are necessary, essential and long overdue.

It is a constant challenge for the rehabilitation sector to ensure access to quality rehabilitation services given dynamic personal, environmental and professional contexts. The following areas are just a few of those highlighted in the World Report to address barriers and enhance access to and delivery of quality rehabilitation services for people with disabilities: increased integration of user involvement, development of sustainable funding mechanisms, professional trainings including continuous professional development, and capacity building activities at the service, centre and sector levels[6].

Handicap International's background

Most of the projects implemented over the past 30 years by Handicap International programmes include rehabilitation activities. Rehabilitation is a complex area that is often difficult to define given the diversity of rehabilitation activities; however, Handicap international's rehabilitation interventions typically include:[7]

- activities that support regular or specific services, public or private, to deliver a wide variety of physical and functional rehabilitation services for people with disabilities and temporary or permanent congenital or acquired impairments (by accidents, communicable or non-communicable diseases, chronic or acute, etc.);
- services that require a diversity of trained and competent professionals where activities are administered at different levels (from local to regional and national levels) and in different contexts (emergency, reconstruction, development).

Generally, Handicap International's rehabilitation interventions:[8]

- adhere to Handicap International Federation's principles;
- primarily promote physical and functional rehabilitation activities instead of medical rehabilitation activities;
- promote a user-centred approach where actions are tailored to the user and his/her supports, not only at a universal/generic level;
- promote actions focused mainly on physical and functional rehabilitation, prevention and support of people with disabilities and physical impairments;
- coordinate actions with physical and functional rehabilitation stakeholders (service users, service providers and authorities) and at all levels (local or community-based or sectoral);
- promote the development of a multidisciplinary approach;
- support actions aiming at improving access to services (financial mechanisms) as well as sustainability of the sector and the services;
- although particularly concerned with development strategies, contribute expertise in all contexts, from emergency to development.

One of the challenges identified in Handicap International's Federal Strategy 2011–2015 is the improvement in the quality of rehabilitation services offered.

Operational research, innovation and knowledge-sharing work needs to be carried out into the quality of rehabilitation service delivery in post-crisis and low-resource settings. In reconstruction and development settings, the emergence of rehabilitation professions and local training for professionals is also a means of ensuring high-quality service delivery. Continuing education, as well as supporting the national and regional professional associations responsible for accreditations (quality control), will be a growing focus of our field action.

2. About the seminar

Seminar objectives

Handicap International hosted a one-week seminar, "Quality Management of Global Rehabilitation Services: Global Experiences, Innovations and Shaping Future Reform", in Ougadougou, Burkina Faso, on 11–15 June 2012. The objective of the seminar was to enable rehabilitation professionals to have a better understanding of the overall situation and current reforms in rehabilitation, and to develop awareness and increased shared identity as members of a practice sector.

Specifically, the seminar aimed to develop better knowledge of the global needs for rehabilitation services, current responses to those needs, as well as common areas of strength and challenges among participants. Additionally, it aimed for participants to gain practical skills in emerging approaches to quality management of physical rehabilitation services, and to build consensus on shared ways forward. During the seminar, particular emphasis was given to the current potential role of continuing professional development to respond to these challenges.

Seminar details

Seminar participants included Handicap International staff and partners involved in the management of rehabilitation programmes and projects from over 12 different countries. The timetable for the seminar can be found in Appendix 4, as well as a list of seminar participants in Appendix 5.

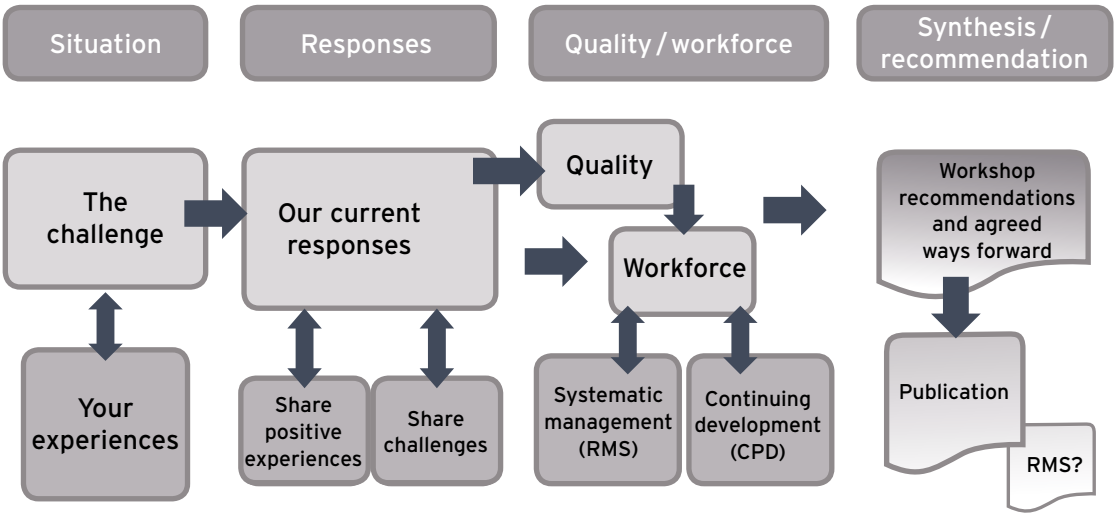
The seminar compared and contrasted models of practice, examined and critiqued a proposed approach to quality assurance of physical rehabilitation centres (PRCs), and enhanced participants" understanding of sectoral reform and innovative practice areas through collegiality and consensus development. Seminar documents and proceedings are available on Handicap International's seminar website[9] under the title "Quality management of global rehabilitation services".

3. About this report

This report outlines the proceedings and discussions of Handicap International's seminar "Quality Management of Global Rehabilitation Services: Global Experiences, Innovations and Shaping Future Reform". The report closely follows the structure of the seminar week, highlighting key information, contributions, discussions and recommendations from the participants.

During the seminar week, the participants from over 12 countries shared positive and challenging rehabilitation responses and analysed the quality of services, focusing upon the management and development of the workforce. A general overview of the seminar's content is shown in Figure 1. Based upon their lessons learned from rehabilitation experiences, the participants then developed short-term and long-term recommendations, to be shared widely with the aim of contributing to the enhancement of global quality rehabilitation.

Figure 1: Workshop content



Overall, this report lays out the presentations and information assimilated during the seminar that can be used as a contribution to the emerging evidence base for quality management of global rehabilitation services. It specifically mentions Handicap International's Rehabilitation Management System (RMS), which at the time of the seminar was in the pilot phase with select programmes. This methodology is available internally to Handicap International staff and partners and the results of the RMS pilot programmes were presented at the seminar. The RMS methodology will continue to be refined and developed, with updates available from Handicap International[10].

1. Seminar themes

1.1 Quality global rehabilitation

Presentation by Wesley Pryor, Principal Technical Advisor (Rehabilitation) Asia Region

Often, in low-income and middle-income countries, the rehabilitation sector is disconnected from the health sector and is closely linked with poverty reduction strategies, international and local development, victim assistance's international frameworks and emergency responses. When comparing data from various countries, there are different costs and funding mechanisms for rehabilitation which reflect the diversity of national contexts in which the services are being delivered.

The World Report on Disability's rehabilitation chapter recommends the following responses to reduce barriers to rehabilitation: assess and revise or introduce policy / plans; develop, review and improve financing; increase human resource numbers and capacity; establish new, or expand and improve services; increase access to assistive technology; and research and evidence-based practice (see Table 1 which highlights examples of current rehabilitation responses and challenges related to each one of these six areas).

Table 1: Current rehabilitation responses and challenges

World Report on Disability's six rehabilitation recommendation areas	Current responses in recommendation areas	Future challenges in these responses
Policy/plans	FATO mapping of rehabilitation sector, South Asian rehabilitation mapping	Limited rehabilitation policies are in place and there is no standard definition of rehabilitation or model policies
	National examples, i.e. Nepal's policy development etc.	Limited models of services
	Disability at a Glance publication series by UNESCAP	Lack of data specifying world-wide "rehabilitation needs" data
	Disability Action Council – Cambodia	Action plans not matched with expertise and resources
Financing	Humanitarian model, sustainability emphasis	Disability and poverty not well understood, underfunded
	Rehabilitation in emergency	Overall health funding is inadequate, especially in disabling diseases/allied health
	Emphasis on sustainability	"De-medicalisation" of disability – rehabilitation is complex to fund in social dimensions
	Low-cost, appropriate technology	Perceived high material cost of AT
	Community-based rehabilitation	
	Equity funds	

Human resources for health (HRH)	The HRH initiative	Very weak emphasis on mentoring in INGOs Limited emphasis on rehabilitation services in HRH responses
	National initiatives	Very limited opportunities for ongoing formal learning
	Foundation training	Complex workplace issues in national governments
	Upgrade programmes	
	Innovative learning methodologies	Limited mentoring, humanitarian agencies with only medium-term visibility
Services	Ongoing efforts to increase services	Very little evidence for the most effective approaches
	Humanitarian responses	Very little impact evidence
	Outreach and mobile services	No uniform indicators
	Renewed emphasis on quality	Funding challenges around services in general and quality / mentoring particularly
Assistive technology (AT)	Low-cost, quality prosthetic and orthotics	Supply chains
	Wheelchair guidelines	Sustained purchasing
	Local artisans	Variable quality and compliance with standards and guidelines
	Innovative referral and delivery mechanisms	Continuing improvement
		Human resources
Research and evidence-based practice (EBP)	Research is focused on high-end	How can we formalise and focus our learning?
	No policy research in rehab	How can we facilitate and participate in research?
	Sustainability research	How can we build awareness of EBP in our own workplaces?
	Operational research is piecemeal	
	EBP not well understood	

Overall, to progress towards quality in global rehabilitation, it may be helpful to establish and strengthen the rehabilitation sector identity. The sector may benefit from workforce development by strengthening rehabilitation associations, planning and continuous professional development (CPD). Alternative practice models and forging new partnerships emphasising the cross-sectoral nature of rehabilitation may contribute to improved quality of and access to rehabilitation services in complex and low-income environments.

Looking ahead at the ways forward for global rehabilitation, it may be valuable to focus on:

- influencing how rehabilitation services are included in efforts to strengthen general health care systems;
- quality and standard models of basic physical rehabilitation services;
- human resources, through leading by example;
- building consensus through associations;
- continuing professional development;
- standardised sectoral indicators building upon the WHO's International Classification of Functioning, core sets and surveillance[11];
- formal learning opportunities;
- developing long-term programme strategies (instead of successive short-term projects);
- developing synergies and complementarity with other agencies for a common vision.

1.2 Reforming rehabilitation and allied health: an Australian case study

Presentation by Rowan English (Dip. App. Sc.i (P&O), MSc, MBA), Head, National Centre for Prosthetics and Orthotics (NCPO), La Trobe University, Australia

Australia is the sixth largest country in the world and is a high-income country, ranked 19th in terms of per capita GDP. The large continent is mostly desert with fertile plains in the south east and hosts a diverse population with 25% of the population born outside Australia. English is spoken as the primary language but over 100 languages are used. The population is highly urbanised with 89% living in a city. As a result, the development of health services in Australia has mainly been focused on metropolitan and regional areas, with both on-site and outreach locations. The Allied Health and rehabilitation sector has been highly influenced by education and clinical services advancement. A review of 30 years of development in rehabilitation, clinical services (mainly with a focus upon prosthetics and orthotics [P&O]), and education reforms in Victoria, Australia indicates that progress has been a long process with mistakes, dead ends and successes along the way.

1.2.1

Victoria, Australia in 1982

In 1982, the Australian population was 15.3 million, while the Victoria population was 4.0 million and the Melbourne population was 2.7 million. There was good access to health services and basic rehabilitation services were available. During this time, the country was affected by droughts, floods and forest fires.

The rehabilitation sector saw the beginnings of team development; however, it was still very doctor-driven: the doctor would often make autonomous decisions without consulting other staff. Acute rehabilitation was quite separate, and generally rehabilitation was more linked with long-term care. It was viewed as "paramedical services" rather than Allied Health services, which resulted in very few leadership positions available for rehabilitation professionals. Rehabilitation was considered a lower priority.

Clinical P&O was very limited with regard to "early" involvement, resulting in no pre-surgical involvement and long delays. Additionally, P&O services were remote, with no on-site service, so clients often had a long distance to travel for services. The "Free Limb Scheme" from 1973 was used for all amputees and had a limited list of components.

The Allied Health education requirements varied. There was great disparity among the courses, and the structure was very hierarchical. Physiotherapists, occupational therapists and speech pathologists studied for a four-year degree, while P&Os studied for three-year diploma. For P&Os, their programme had a very technical focus and limited acceptability in the field.

1.2.2

Victoria, Australia in 2012

In 2012, the Australian population was 22.5 million, representing an increase of 48%. The Victoria population was 5.7 million, representing an increase of 43%. The Melbourne population was 4.0 million, representing an increase of 48%. There was good access to health services and the increase of the ageing population was changing the health care environment. Environmental issues remained, including a lack of fresh water, droughts, floods and forest fires.

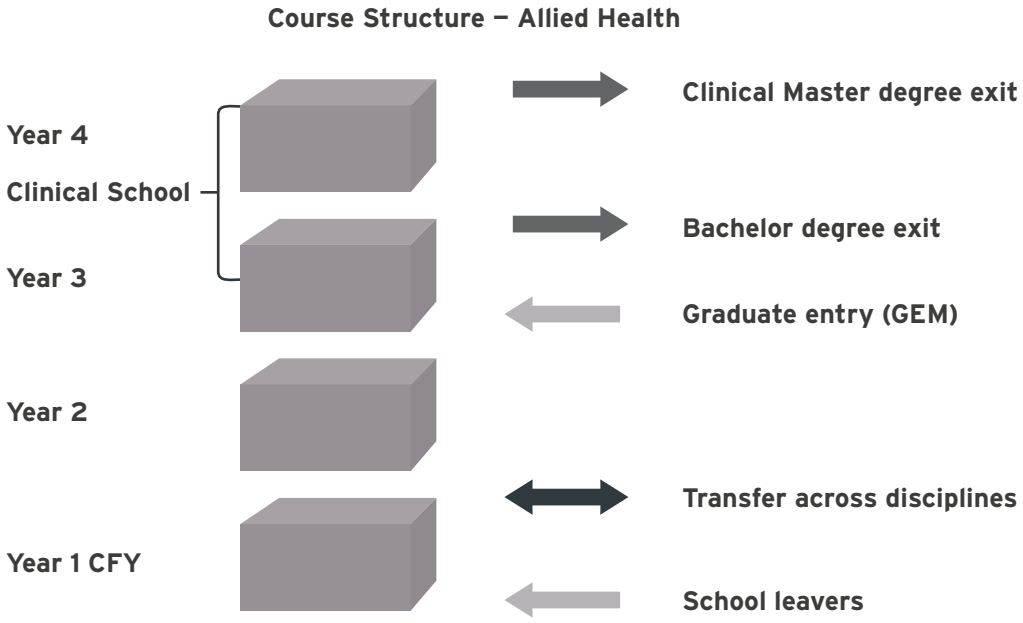
The rehabilitation sector was composed of multidisciplinary teams in specialist areas, such as the areas of amputee, stroke and geriatric care. Inter-profession education was encouraged, along with client-centred care. Case managers led teams and there was a greater range of clinical disciplines. Health care was also provided outside of hospitals, such as ambulatory care, community-based care and home settings. The doctor was a team member and decisions were based on evidence where possible. Clinical research was a part of practice and ongoing quality improvement activities are viewed as essential.

Clinical P&O saw a shift where the services were fully integrated into the multidisciplinary team. Outcomes were regularly measured and there was increased accountability through financial, clinical and minimum educational standards.

Allied Health education was now developed in close partnership with health services. There was parity across all allied health education requirements, with a four-year combined degree (see Figure 2 for further details). There were strong educational

emphases on the multidisciplinary team, the use of evidence and the use of research skills. There was also a deeper provision of the theoretical underpinnings of practice. Regarding P&O education, there was parity with other disciplines and strong emphases on clinical and theoretical knowledge rather than technical knowledge. Additionally, there was a strong aim for ongoing learning beyond the educational programmes.

Figure 2: Allied Health course structure



1.2.3

Synthesis of factors resulting in change

There are many factors that led to the positive shifts in the rehabilitation sector, the Allied Health professionals, and their education over the past 30 years in Victoria.

Rehabilitation was recognised as a specialist area among other health professionals, resulting in the areas of nursing, medical and Allied Health. The rehabilitation sector developed strong leadership with insightful individuals and underwent a restructure. Additionally, rehabilitation received specific targeted funding and quality improvement was emphasised through measurement, research and benchmarking. Specialist teams developed, in addition to the development of sub-acute services in Victoria. Therefore rehabilitation services were available in both acute and sub-acute services.

Clinical P&O received decentralised funding and was recognised as more clinical than technical. P&O professional associations formed, which had a political impact and led to minimum standards for their members. CPD was offered through universities with options. A "conversion" course was offered for original diploma graduates to receive a Bachelor's degree in P&O. Upgrade programmes were offered for Cambodian ISPO (International Society for Prosthetics and Orthotics) Category II graduates and for Japanese graduates, and a graduate entry Master's programme was established for those with other educational backgrounds. In the future, a "conversion" from a Bachelor's degree to a Master's degree in P&O will be available. Industrial organisations increased pay rates and increased benefits resulting in a parity of pay across all Allied Health disciplines.

Allied Health education saw a steady continuous development, with a parity of educational programmes across all disciplines requiring four-year combined Bachelor/Master's degrees. Closer ties between disciplines were formed through the structure of educational programmes, common subjects and a common first year of the programmes. Allied Health has diversified and now includes the following disciplines:

- physiotherapy;
- prosthetics and orthotics;
- occupational therapy;
- speech pathology;
- dietetics and nutrition;
- podiatry;
- orthoptics;
- social work;
- audiology;
- psychology.

For example, the new P&O educational programme focuses upon clinical evidence, research, theoretical principles, physical assessment, and clinical problem solving. It is closely linked to graduate attributes and is guided by the Australian Quality Framework.

Overall, the progression of rehabilitation and Allied Health has been a long, steady and evolutionary process both in Victoria, Australia and more globally. The reform has been highly influenced by dedicated, insightful leadership and essential structural changes. Governmental policies have been developed and, most importantly, policy has been driven from practice which has resulted in a positive impact. More funding has been allocated to rehabilitation services and, finally, Allied Health education is more in synergy with clinical practice.

1.3 Alliances for strengthening global rehabilitation: a case study of the African Federation of Orthopaedic Technicians

Presentation by Masse Niang, President, FATO

In order to support quality rehabilitation in the context of international development in African states, it is important to first understand the current challenges. Some African states experience difficulties in guaranteeing access to quality rehabilitative care for people with disabilities. Many international organisations have invested efforts in various countries for several years; however, their actions are often very low-priority parts of a national policy with medium- and long-term action plans.

The African Federation of Orthopaedic Technicians (FATO) is a civil society organisation that aims to promote rights and access to functional rehabilitation of people with disabilities in Africa through the creation of professional networks[12]. These networks include prosthetists and orthotists, physiotherapists, occupational therapists, rehabilitation doctors, etc. Despite the legitimacy obtained, FATO is an organisation with limitations. After several thematic congresses and specific trainings to meet the demands of members, very little has changed in the current situation. Limitations often involve the training structures. Organisations of people with disabilities (DPOs) do not play an active role for various reasons beyond their control, so the users' voices are not always heard or understood. Funding partners often have an inadequate funding method and work must be done at their level according to their specifications. Additionally, despite successful examples in Africa in terms of integration of people, politically and economically, the field of disability is often forgotten in African community policies.

In an attempt to improve this situation, FATO, strengthened by its experiences at national, regional and international level, proposed to work on the development of national rehabilitation plans in two steps. The first step involved a full mapping of the rehabilitation sector in African member states. The second step then aims to provide recommendations for the development of national rehabilitation plans by 2013.

FATO has learned many lessons through its congresses, activities and trainings. FATO congresses have been held in six countries (see Table 2). The next FATO congress will be held in Ivory Coast on the theme "Addressing barriers to development of rehabilitation: good practice for the national plans", with more than 400 participants from more than 40 countries expected to attend this important event.

Table 2: Details of FATO congresses

FATO Congress location	Year	Theme	Number of participants
Niamey, Niger	2002	Amputations and related components	About 40
Lomé, Togo	2004	Poliomyelitis and related components	About 60
Sally, Senegal	2005	Training of orthopaedic consulting team on the management tools for a better sustainability of structures and for equity of care	About 80
Kigali, Rwanda	2007	How to endow African countries with sufficient professional [sic] to face the rehabilitation needs of disabled people	About 212
Hammamet, Tunisia	2009	Disability and technologies: analysis of the situation and appropriate development in African countries	About 250
Arusha, Tanzania	2011	Ensuring access to appropriate orthopaedic and rehabilitation services: the right to quality of care	About 400 from more than 40 countries

Further, FATO has focused on building the capacity of rehabilitation professionals through quality service trainings and multidisciplinary teamwork. In 2012, more than 1500 people from about 60 African countries benefited from these practical trainings.

As a result of FATO activities, there have been many positive results. In Lome, Togo, ISPO recognised the P&O school as a Category II school. In Senegal, the public services now recruit prosthetists and orthotists. A diploma training course in Rwanda was created after the FATO congress in 2007. Training scholarships have been obtained from the World Health Organization (WHO) and Handicap International Belgium, which led to the participation of applicants from FATO member countries.

Diploma trainings have been officially recognised in the following countries: Senegal, Rwanda, Burkina Faso, Cameroon, Mali, Congo Brazzaville, Guinea Conakry, Niger and Central African Republic.

FATO has administered various thematic trainings at the request of national associations in one or several countries, such as in Central African Republic, Burkina Faso, Rwanda, Niger, Togo, Senegal, Mali. Additionally, 23 national associations are now recognised, compared with four before FATO's inception.

FATO has also assisted in increasing states' contribution to the ongoing budgets of national rehabilitation centres in Mali, Senegal, Burkina Faso, Niger and Central African Republic. Stronger partnerships now exist with about 15 international organisations, service providers and

orthopaedic component manufacturers and suppliers. Three ministers participated in the congress of FATO from Tanzania, Zimbabwe and Central Africa Republic. Finally, the FATO survey for the mapping of rehabilitation was administered to 29 African countries on a voluntary basis. This information provides the first comprehensive regional mapping of rehabilitation sectors in Africa. Handicap International and WHO have supported the processing of the data through internships. The process is still in progress in order to improve the results and their diffusion.

However, despite these advances, there are challenges looking ahead. It is important to ensure the government's role in the successful implementation of a national plan. This will better ensure that the government ensures the implementation of the national policy, that there is increased consistency with the implementation of rehabilitation activities and that the rehabilitation objectives will be better coordinated in the long term.

1.4 A workforce for quality global rehabilitation: reforms, innovation in human resources for health, continuing professional development and learning

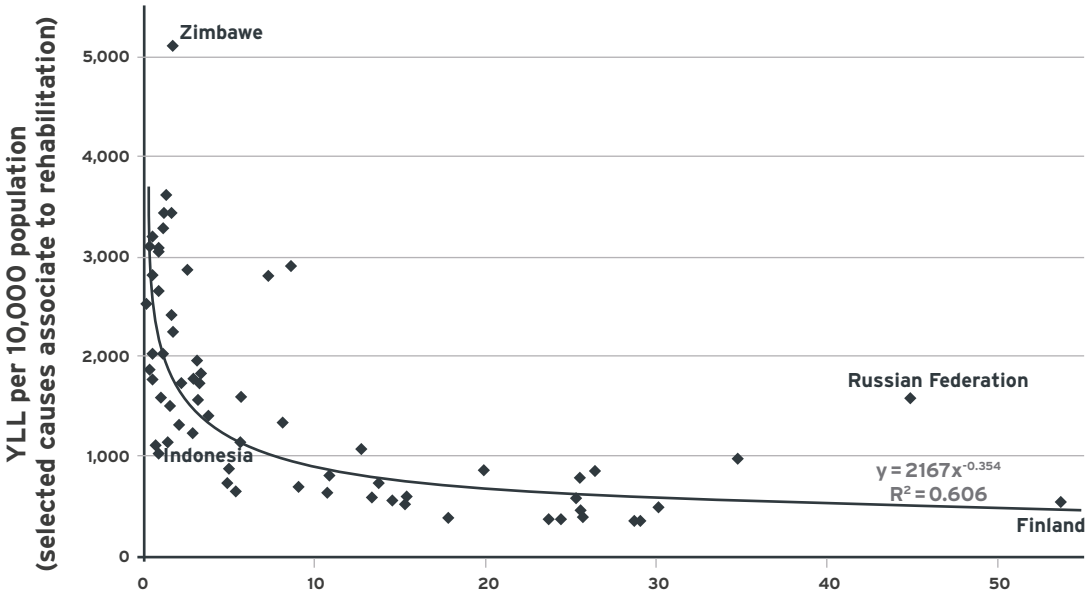
1.4.1

Continuing professional development in rehabilitation: a synopsis and emerging paradigms

Presentation by Wesley Pryor, Principal Technical Advisor (Rehabilitation) Asia Region

Current HR development approaches are insufficient to meet contemporary challenges. In physical rehabilitation, musculoskeletal diseases are the most common health condition, accounting for 74% of work-time lost in high-income settings[13]. There is a significant effect of a lack of rehabilitation services on the number of life-years lost (Figure 3)[14].

Figure 3: Life years lost due to lack of rehabilitation[15]



The current approach to continuing education is often more **conditional** than **continuous.** Presently, professional development in low- and middle-income countries is largely unplanned and driven by development projects. It is typically informal, unrecognised and is often repetitive. It sometimes relies on individual efforts to seek formal education and accredited programmes, but with weak or non-existent funding mechanisms to do so. Generally, there is very little human resources for health (HRH) information[16], and rehabilitation data regarding the workforce is largely unknown. Additionally, workforce planning data is not clearly defined in general or specifically in rehabilitation[17]. There is a profound lack of rehabilitation professionals and limited capacity to employ new ones. Furthermore, there is no discourse on leadership development.

In order to meet the World Report rehabilitation recommendations, human resources are key[18]. The rehabilitation sector needs to consolidate its strength and identity through ongoing relevant professional development. The sector must lead through coordinated targeted efforts to support the development of a strong workforce and to develop continuing education, relevant to new disease patterns. A defined global rehabilitation sector is a specific and unique workplace challenge. There are shared theoretical and practical bases, but different applications among different professions and contexts. Therefore, Handicap International outlined the following definition of a "global rehabilitation practitioner" when planning a regional project that included a continuing professional development (CPD) component in South Asia:

A practitioner of Global Rehabilitation will be strongly positioned to provide excellent clinical care, management and/or direction, drawing on the best available evidence and applying it to the unique and challenging working contexts, particularly post-conflict, disaster or low-income situations. They have additional knowledge and skills in broader disability and poverty alleviation concepts, and are forceful representatives of an emerging sector of global rehabilitation.

This Handicap International CPD project, which is featured in detail in the next section, reasoned that both global rehabilitation and discipline-specific skills along with extended applied skills are equally important for a strengthened rehabilitation workforce in South Asia. Global rehabilitation education is essential to better understand the situation and potential solutions, to evaluate responses and to advocate for change. Discipline-specific educational trainings, along with extended applied skills, allow rehabilitation professionals to connect with professionals from their own discipline in addition to other disciplines. This complementary combination skill set enables rehabilitation professionals to further understand broader health and social issues as well as to develop deeper professional skills.

1.4.2

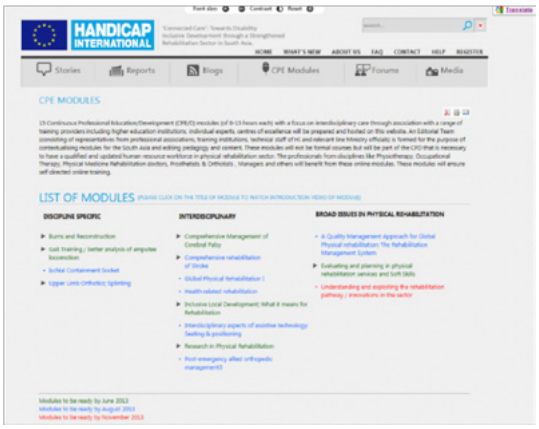
Project case study "Towards disability inclusive development through a strengthened rehabilitation sector in South Asia"

Presentation by Vivek Singh, Regional Rehabilitation Project Technical Coordinator

In response to current piecemeal, unplanned, unmeasured and ad hoc approaches to training, Handicap International's South Asia regional project "Towards disability inclusive development through a strengthened rehabilitation sector in South Asia" has a specific component focused upon the development of CPD[19] modules. The three-year project, which started in 2011, focuses upon four countries: Afghanistan, Bangladesh, Odisha State in India and Sri Lanka.

The modules have been developed collaboratively using Handicap International internal resources and through association with training providers such as universities, ISPO and other rehabilitation professional bodies. The process is overseen by an editorial committee and is implemented by a working group.

A total of 15 CPD interdisciplinary and discipline-specific modules have been developed (Table 3). The modules were selected based upon Handicap



International's experience, the demand from countries' professionals and global needs. The time for each e-learning module ranges from 6 to 15 hours, and all modules are available on the Rehab monitor website[20] in various forms, such as videos, case studies and discussion panels. The modules are being delivered through e-learning and complemented with face-to-face teaching for select modules, using a training of trainers (TOT) approach with a designated trainer task force for each module. The trainer task force is supported both in person and through teleconference support as needed.

Table 3: Handicap International's Regional Rehabilitation Project CPD modules

CPD broad issues in physical rehabilitation modules	CPD interdisciplinary modules	CPD discipline-specific modules
A quality management approach for global physical rehabilitation: the Rehabilitation Management System	Comprehensive management of cerebral palsy	Burns and reconstruction
Evaluating and planning in physical rehabilitation services and soft skills	Comprehensive rehabilitation of stroke	Amputation, gait training and gait analysis
Understanding and exploiting the rehabilitation pathway / innovations in the sector	Global physical rehabilitation	Ischial containment socket
	Health-related rehabilitation	Upper limb orthotics; hand splinting
	Inclusive local development; what it means for rehabilitation	
	Interdisciplinary aspects of assistive technology: seating and positioning	
	Research in physical rehabilitation	
	Post-emergency allied orthopaedic management	

All of the modules focus on interdisciplinary care. It is important to note that they are not formal courses but form a part of CPD that is necessary to have a qualified and updated human resource workforce in the physical rehabilitation sector.

Rehabilitation professionals, including physiotherapists, occupational therapists, physical medicine rehabilitation doctors (physiatrists), P&Os and others, will benefit from the online training.

1.5 Introduction to the Rehabilitation Management System (RMS)

Adapted from Draft of "5-point rehabilitation management system, Part I – Introduction and description of the management system", by Wes Pryor

1.5.1

Quality management of physical rehabilitation

Numerous international instruments reinforce the importance of accessible and affordable, high-quality physical rehabilitation services. The UN CRPD, in particular, calls on State Parties to promote access to health care for persons with disabilities, as well as to promote personal mobility and independent living[21]. These instruments reinforce the requirement for quality physical rehabilitation services, including physiotherapy, occupational therapy and the provision of quality assistive technology.

More than being a requirement, though, access to quality rehabilitation is good public policy; it is economically advantageous to increase participation in community life through improved function, adjustments to the environment and community attitudes, and with the support of assistive technology. Physical rehabilitation can reduce the overall costs to individuals, communities and society in general through reductions in inpatient care, earlier or more frequent return to work, participation in home life and reducing the burden on carers[22].

Using quality management approaches can help make rehabilitation services more effective and efficient. In turn, this can help ensure that high-quality services are consistent and sustainable.

1.5.2

Purpose of the RMS

The overall purpose of the RMS is to assist rehabilitation service providers in effective and strategic management of their services in order to provide the highest quality care in the most sustainable and efficient manner. In doing so, this management system is intended to contribute to a range of responses that promote the full participation of persons with disability in all aspects of society. The first phase of the system development excludes clinical governance indicators and focuses instead on the overall management of the service.

1.5.3

Suggested use of the RMS

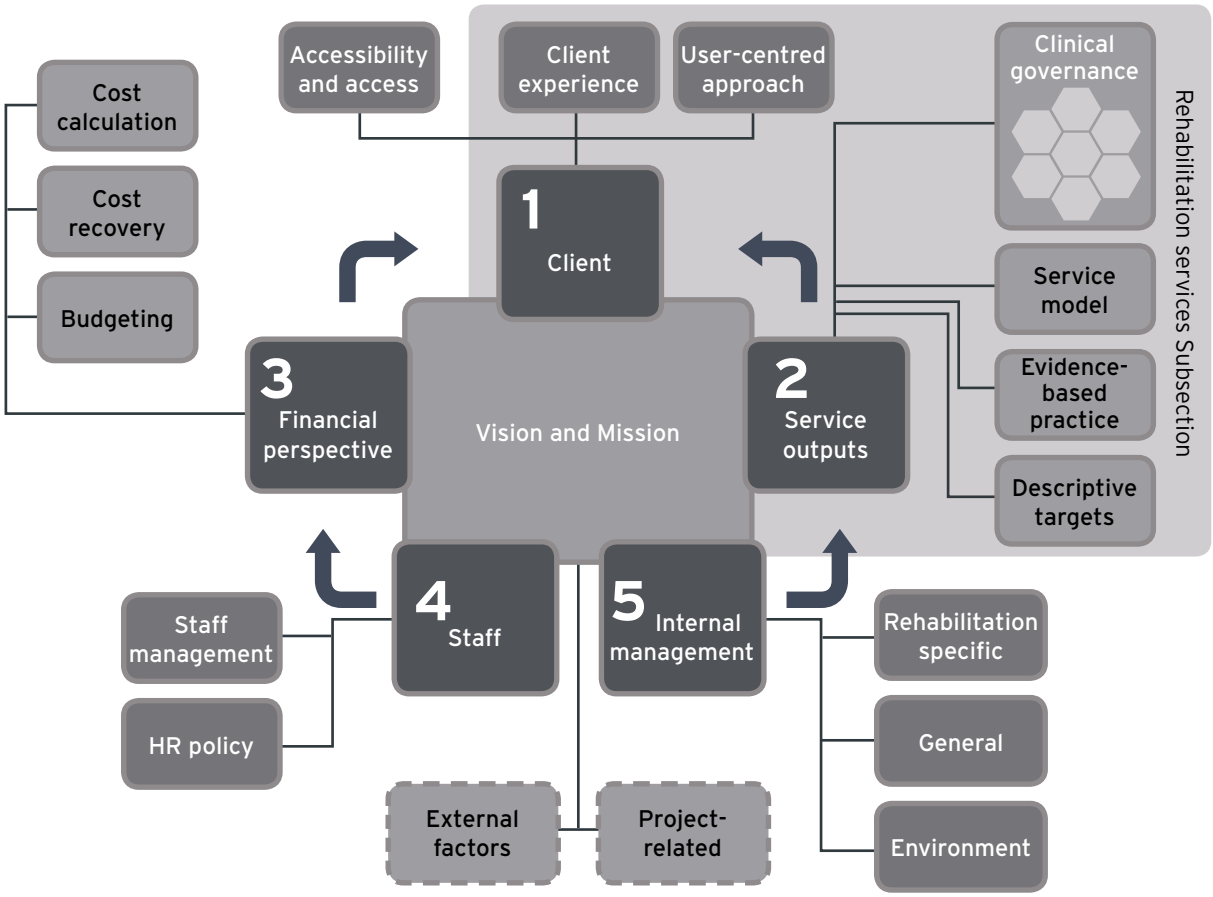
How to use the RMS

This management system should be used systematically and routinely. While it is comprehensive, the system condenses many areas into a small number of core areas, each with a scorecard to make an overall analysis of a service's current capacity. The overall structure of the system is presented in Figure 4. There are five core evaluation sections, including: client, service outputs, financial perspective, staff and internal management. Each core section is further divided into subsections as illustrated

in Figure 4. The rehabilitation services subsection is indicated in the colour grey on the figure. The scorecards orient the user to identify strong and weak areas.

The RMS may also provide a useful summary of relevant policies, guidelines, consensus, experiences and research evidence. These summaries can be used to plan, monitor, evaluate or manage projects. For users of the comprehensive RMS, detailed instructions are provided in how to use specific sections.

Figure 4: Structure of the 5-point Rehabilitation Management System



Target audience

General managers will be the main users and/or coordinators of the RMS process; however, there could be very positive benefits to delegating responsibilities for subsections to unit managers or senior staff. In situations where that hierarchy does not exist, there might be potential for collective completion of the scorecards and strategic planning, with oversight from a designated focal point for the quality assurance process. Further, it might be appropriate for an external evaluator to use the RMS occasionally. Allocating RMS scorecards to staff who have not previously been considered managers or supervisors may be a positive way to delegate ownership and responsibility for outcomes, where management has been the responsibility of just a few people in the past.

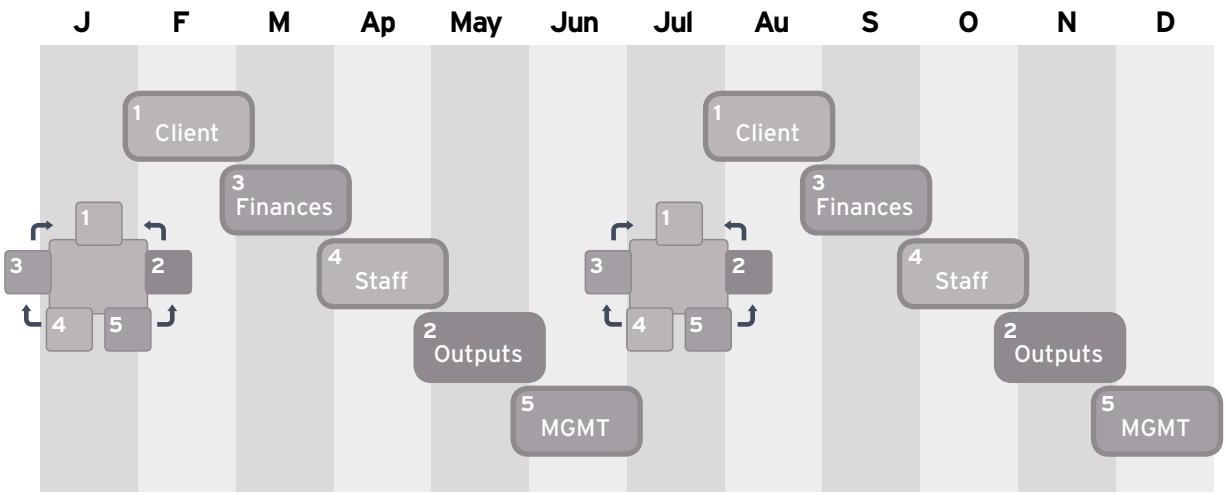
Regardless of how each centre uses the RMS, it is essential that individuals and groups know their responsibilities and ensure their contribution to the measurement, strategic development and implementation processes with clearly defined roles.

While the principal intended purpose of this system is to act as a comprehensive quality management process on an ongoing basis, the RMS might also be used in partnership with technical or donor agencies to target areas that are the most important to develop. It might also be used as a self-study instrument before an external evaluation. In many contexts, the only evaluations that centres undergo are in relation to projects, and often the evaluation is conducted by external people who may not be able to determine complex operational details and genuinely explore reasons for strengths and weaknesses. This means that those findings might not be as useful in strategic development as they should be. Also, external evaluations are rarely uniform since they are tailored to specific project cycles and are conducted by different people, with different experiences, values and perceptions. This means that the key outcomes for the service provider can be overlooked, or can be hard to compare from year to year. Therefore, using the RMS can offer a framework for other specific evaluations, accreditations and so-on, in a way that allows clear, systematic longitudinal monitoring regardless of who is conducting the reviews.

Frequency of monitoring and evaluation

Any management system or quality assurance process needs to be done routinely and at pre-determined intervals. The management system proposed in Figure 5 provides options for examining different elements of an overall service, so it could be possible, for example, to stagger the analysis over a year (or some other time-period). It is probably convenient to allocate one scorecard to a relevant manager or supervisor, or even to circulate scorecard analysis between members of teams. Some managers might have two or more scorecards, and, ideally, a group of managers, supervisors or scorecard "custodians" might meet each six months to look at the overall scores and to plan for the next period of action.

Figure 5: Monitoring and evaluation frequency of RMS



Obviously, ongoing monitoring is required for some elements to achieve necessary high-quality scores. In these situations, some data collection will need to happen daily. The management system itself, though, should not require ongoing monitoring, but may instead suggest indicators for daily or other short-period, constant monitoring.

If used properly, the RMS should not increase the time dedicated to quality management. Instead, it should focus managers on key indicators and service areas. This should result in greater efficiency and reliability, since indicators are consistent from period to period, and the examination of those indicators is streamlined with strategic process adjustments to improve them. In situations where proposed indicators are already measured, perhaps in more detail, this measurement should continue, rather than changing pre-existing processes that are already understood and functioning effectively in a particular context.

1.5.4

The RMS development process

The RMS is based on the principles of Balanced Score Cards, which originated in private enterprise but are commonly adapted to health care. After a literature review, with particular emphasis on consensus-based guidelines in areas relevant to physical rehabilitation, the findings were translated into descriptors of standards, allocated to the five key areas which are derived from Balanced Score Cards in health care, and further sub-divided into meaningful sub areas.

As far as possible, the RMS makes recommendations on the basis of sound evidence, especially from review documents or consensus papers. It also takes into account guidelines or recommendations from relevant national and international documents. Users of the system are encouraged to examine the RMS documents

in more depth, particularly while developing actions to address limitations identified during the measurement process.

Once the "standard" for each indicator was described using a simple sentence, it was allocated a score of "2". Additional descriptors for scores 0, 1 and 3 were then developed by identifying critical limitations, moderate limitations or examples where the standard might be exceeded. In this way, "critical" issues, defined as issues that might result in personal harm, legal issues or similar, are defined as "0". Areas with some limitations that were not critical, but where the standard was not met are allocated a score of "1", the standard "2", and situations where the standard is exceeded are scored "3". This preliminary set of standards and scoring was used for pilot testing by the primary author.

After pilot testing, training materials were developed before implementing the system in additional rehabilitation centres. A process evaluation survey is being used to capture the experiences of the implementing teams, including team members at the evaluated centres. These results will be used in further refinement of the RMS system.

1.5.5

Scope of the RMS

This RMS is not intended to be a step-by-step "recipe" for all activities in a physical rehabilitation service. Nor is it intended to be a detailed, comprehensive "toolkit" with individual tools and instruments for all the steps necessary to provide high-quality physical rehabilitation care. Instead, the RMS combines elements of a manual, a measurement system and a strategic planning process. This way, the management system is adaptable to many situations and contexts and aims to facilitate effective use of pre-existing systems and tools. Different users may decide to focus on just a few scorecards, or look at sub-categories from all of the scorecards, with a longer-term plan to examine the full range of indicators. This choice will depend on the emphasis placed on the RMS for evaluation or monitoring, capacity and the priorities of the team.

Some issues with this approach

Using scorecards means that the final result is a set of numbers that:

- are highly aggregated;
- do not indicate the underlying causes of limitations in final scores;
- indicate only "snapshots" in time, and not how variables and indicators may fluctuate over time;
- make a priori assumptions about the relevance of standards in all circumstances, rather than defining local standards;
- are not participatory in their development;
- assume a certainly level of management competence, knowledge and skill in understanding and applying management concepts.

The purpose of using scorecards is to create a meaningful checklist of individual indicators that can be used to check the quality of a rehabilitation service against core international standards, good experiences and, as appropriate, local laws, customs and situations. However, reducing a complex set of processes into a small number of "scores" is not enough.

For this reason, this management system:

- indicates sources of the quality criteria for deeper analysis;
- encourages (and requires) longitudinal monitoring of important quality and service indicators that are not part of the management system;
- is intended to be modified according to the particular setting of the service.

In this way, the system is a scaffold onto which many other measurements, processes and indicators, from projects, pre-existing management approaches and so on, can be attached.

Why are there no comprehensive protocols on specific actions within a rehabilitation service?

Some rehabilitation managers, particularly those responsible for managing clinical services or processes like procuring resources, referrals and similar processes, may be looking for specific step-by-step protocols they can include in their services. They may also be seeking a comprehensive "toolkit", including templates for all (or most) of the individual measurements, processes or actions involved in managing a rehabilitation service effectively.

However, even a simple analysis of most rehabilitation services reveals that:

- While most rehabilitation services contain common elements, there are very few that are exactly the same, even within one country;
- Many rehabilitation services exist within an organisation that provides other services;
- There are literally hundreds of processes in the average rehabilitation service.

Because of these basic observations, a total package of step-by-step instructions, complemented with appropriate "tools" to monitor those steps, would be a very large and complex document. Most importantly, it is very unlikely it would be used for the following reasons:

- It would be overwhelming to incorporate all of the processes into pre-existing systems in a reasonable period of time;
- There would very often not be sufficient human resources to enact the change required to incorporate all those tools;
- Rehabilitation providers may already have analogous tools in place, and change may be redundant;
- Some processes, especially concerning financial and related governance aspects, are highly variable according to the specific legal and other requirements of the local setting;
- Many processes are driven by the experience and common practice of staff. In some situations, this is perfectly appropriate – superimposing additional bureaucracy would be unpopular and probably rejected;
- Selecting which treatment protocols should be included would be very complex. Some have strong evidence, others have weak or very little evidence. And, because there is a very large number of specific situations, there would be a very large number of individual protocols.

In other situations, particularly in specific diagnostic groups, there may be many advantages to introducing specific treatment protocols where they are not already in place. However, this is largely the responsibility of well- advanced health care settings or individual practitioners and their clinical judgement. Therefore, the RMS encourages the analysis of whether rehabilitation systems exist, and both the introduction and continuous improvement of these systems, rather than introducing the systems themselves. Nonetheless, efforts to cross-pollinate development of standardised practices are part of the overall suite of RMS development activities.

1.5.6

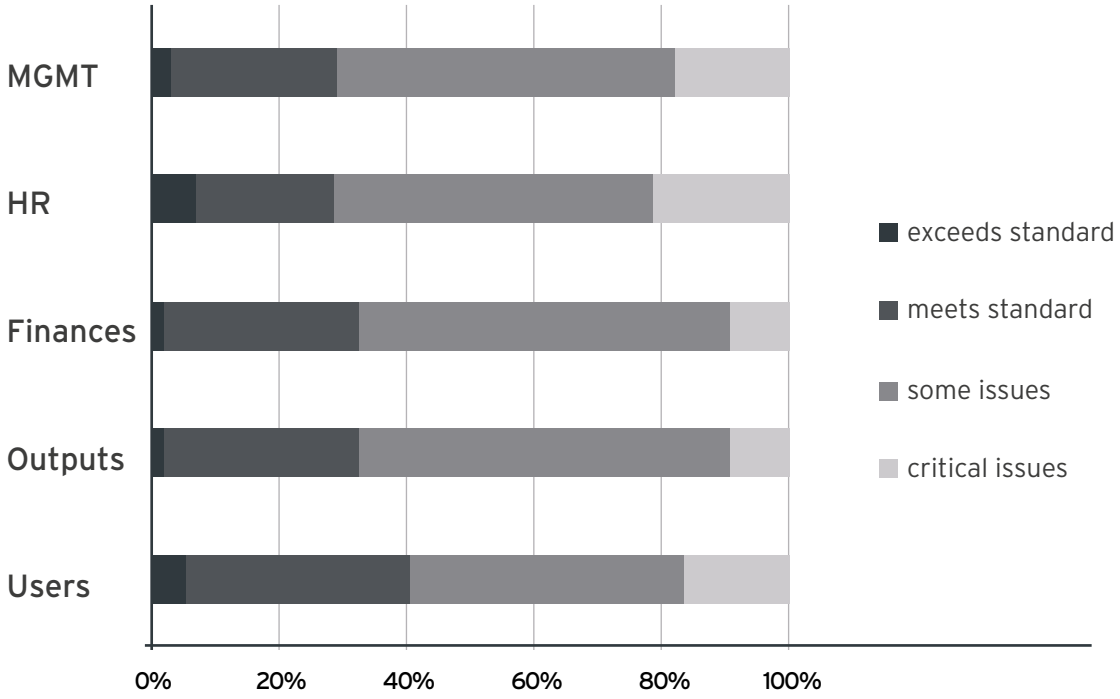
Preliminary results of the RMS

The RMS has been tested comprehensively in nine rehabilitation centres in four countries in South Asia. Smaller implementations, involving just two scorecards, have been done in an additional two centres.

Preliminary global results for the nine rehabilitation centres are presented in Figure 6. Approximately 33% of all indicators either meet or exceed standards and around 15% are critical.

Figure 6: Scores for all centres, corrected for un-scored indicators

(Note: this "correction" takes individual missing indicators into account by computing a score for each service only on the basis of indicators actually scored. Therefore, there is not a penalty for leaving specific indicators blank)



While individual centres are exploring underlying causes of low scores, no global analysis of strong and weak areas or underlying causal factors has been attempted. In general, the results are encouraging in that there are many examples where standards are met or exceeded despite the complex working conditions. While 15% of indicators are considered "critical", in general, it is relatively simple to move from 0 to 1 with only modest adjustments, and often moving from 1 to 2 involves scaling, improving or even simply documenting, pre-existing practices.
More important than understanding overall descriptive statistics, though, will be to interpret which interventions are more effective in improving standards, and whether standards and the process of evaluating them will be sustained and developed. These analyses are part of ongoing plans for the development of the RMS.

1.5.7

Continuing RMS development

At the time of writing, a consensus meeting of an RMS working group is planned for July 2013. During this meeting, an additional literature review to expand the critical analysis of current standards will be conducted. Further, a consensus-building process will be used to propose new indicators and adjustments to current indicators, and modifications to the reporting processes will be proposed.

Looking ahead, additional analysis is required to better understand causal factors for high-performing services. A deeper analysis of reasons for consistently weak indicators will also be necessary to efficiently address common limitations. These actions should be complemented by the development of more standardised systems for core practice areas. Current analysis suggests that individual implementations are developing an entire suite of documentation and processes, ostensibly because it is thought that each centre needs to be bespoke regarding specific context. While that is probably true, it is also self-evident that many processes are similar, if not identical, between different centres. Currently, there has been no effort to consolidate materials. Clearly, this is an important starting point to address service limitations.

Importantly, the RMS does not address clinical indicators. An important next step will be to target those outcomes, and preliminary work on this area is under way.

2. Seminar outcomes

2.1 Continuing professional development analysis

During the seminar, participants discussed continuing professional development (CPD) and identified the following key reasons why CPD was important for the rehabilitation sector:

- Reduce staff turnover;
- Unified standards;
- Efficiency;
- Follow new progress;
- Capacity-building;
- Answer to specific needs;
- Recognition of professional skills by the community;
- Recognition of professional skills by authorities;
- Promote exchanges of skills;
- Self-assessment;
- Adapt to new diseases or new approaches (i.e. social model etc.);
- Complete the basic skills;
- Reinforce professional associations;
- Establish professionalism;
- Motivate the staff;
- Lessons learnt.

Different types of CPD were analysed by the participants indicating who should organise the CPD courses and how long the suggested course should be (see Table 4 for these details).

Table 4: Participant analysis of CPD

Type of CPD	By whom	Length
Training	International school or university	
Foundation training	Regional or national school or university	Years, full time
Formal upgrading	Regional or national school or university	Years, month, full or part time
	Online qualifying training	Flexible
Formal refreshing	School or university	Punctual
	Specialised seminar or conference by official institution or organisation or professional association	Days
Focused upgrading	Internship in a (more) specialised place	Weeks, month, upon needs
	Specialised seminar or conference by non-official body	Days
	Professional publications	Continuous
	Expert assignment	Days to years, upon needs
	Online training	Flexible
	Modular training by NGO or national institution	Days, flexible
Long-term upgrading	Partnership / mentorship with a specialised institution or university	Years

Informal refreshing	Internship in a (more) specialised place	Weeks, month, upon needs
	Specialised seminar or conference by non-official body	Days
	Professional publications	Continuous
	Expert assignment	Days to years, upon needs
	Field visit or study tour	Days to weeks, upon needs
	Professional exchanges	Continuous
	Online training	Flexible
Self-development based on experience	Self (based on users' feedback)	Permanent

During this CPD working group session, the participants concluded that both formal and informal CPD were important and complementary. It was recognised that presently projects supported by Handicap International are usually based on informal CPD; however, the participants acknowledged that this focus needs to shift progressively from informal to formal CPD. During this shift, it is important for projects to consider the external contextual constraints, such as security, time, availability of trainers, existing formal trainings and the various requirements of trainees, employers and ministries.

2.2 Country analyses for managing global rehabilitation by centre level and sector level

During the seminar, participants from the 12 countries analysed their current status for managing global rehabilitation at the centre and sector levels.

Each country rated their progress in managing global rehabilitation according to a scale, indicating "some major issues", "could be better", "about right" and "exemplary". Rehabilitation participants from each country were key professionals in their field and assessed their country's status according to their own knowledge and experience of working in the national context. The compiled results are presented in Figure 7. Each participant also provided further details about their ratings, highlighting the actual situation, the reasons and the anticipated next steps for both of the levels. This additional information is available to seminar participants on the seminar website[23].

Figure 7: Country analyses for managing global rehabilitation at the centre and sector level

CENTRE LEVEL

Some major issues (0)	**Could be better** (18) Burkina Faso; Burundi; Cabo Verde;Cambodia; China/Tibet; Congo; Ghana; India; Indonesia; Iraq; Sierra Leone and Liberia; Mali; Nepal; Palestine; Somaliland; Togo
About right (1) Vietnam	**Exemplary** (0)

SECTOR LEVEL

Some major issues (2) Liberia; Somaliland	**Could be better** (17) Burkina Faso; Burundi; Cabo Verde; Cambodia; China/Tibet; Congo; India; Indonesia; Iraq; Nepal; Palestine; Sierra Leone; Togo; Vietnam
About right (1) Mali	**Exemplary** (1) Ghana

LEGEND

- Some major issues
- Could be better
- About right
- Exemplary

Overall both the centre and sector levels were rated as "could be better" by the majority of the participants. The main reasons identified included the following: limited human, financial and material resources; frequent staff turnover; lack of expertise; poor coordination between centre, sector and international levels; poor coordination between NGO and government; lack of tools and standards to measure quality; lack of governmental recognition and planning, including no national rehabilitation plan; and weak advocacy and policies. The next steps discussed by the participants, at both the centre and sector level, are reflected in the seminar recommendations provided in the final section of this publication. These recommendations should be reviewed and discussed with key rehabilitation sector members at both the centre and sector levels to determine relevant next steps in each national context.

2.3 Country analyses of World Report on Disability recommendations

During the seminar, participants from the 12 countries analysed the current status of the rehabilitation sector in their respective countries according to four of the recommendations in the World Report's rehabilitation section. The four key recommendation areas analysed were:

1. policy analysis and development;
2. human resources and development;
3. expanding service delivery;
4. access to assistive technologies.

Before rating their performance, participants spent time analysing the recommendations and drafted simple statements about the "standard", or "minimum level" for each of the areas. Next, each country rated their progress according to the four key areas on a scale, indicating "serious limitations", "some limitations", "meets the standards" and "exceeds the standards". Results are presented below in Table 5. Each participant then provided further details about their observations, particularly what is happening and why, in the country context for the four key areas of the World Report's recommendations. Detailed information is available for the participants on the seminar website[24].

Table 5: Country analyses of World Report's recommendations

(Note: the countries where two or more participants rated the country's status differently are noted in *italics*)

Key area of WRD recommendation area	Country status			
	Serious limitations	Some limitations	Meets the standards	Exceeds standards
Policy analysis and development	(2) Iraq Unknown A	(10) Burundi Cambodia China/Tibet India Indonesia Nepal Palestine Somaliland Unknown A Unknown B	(1) Vietnam Unknown B	(0)
Human resources development	(3) Burundi Cambodia Somaliland	(7) China/Tibet India Indonesia Iraq Nepal Palestine Unknown A	(1) Vietnam	(1) Unknown B

Expanding service delivery	(0)	(10) Burundi Cambodia China/Tibet India Indonesia Iraq *Nepal* Palestine Somaliland Vietnam	(2) *Nepal* Unknown A Unknown B	(0) Unknown B
Access to assistive technologies	(2) China/Tibet *Palestine*	(7) Burundi India Indonesia Iraq *Palestine* Somaliland Vietnam Unknown A	(3) Cambodia Nepal Unknown B	(0)

Overall each of the four recommendations was rated as having "some limitations" by the majority of the low- and middle-income country participants. This suggests that, according to the workshop participants from the 12 countries, the minimum rehabilitation standards are not attained according to contemporary documents. More analysis is needed to determine the overall status of the countries and the potential need for additional rehabilitation resources and ongoing development of the rehabilitation sector. This analysis should include prioritisation, building consensus on the standards, positive examples, further understanding about funding and evidence about how the recommendations can be efficiently attained.

3. Recommendations and conclusion

3.1 Seminar recommendations

Based upon the extensive seminar exchanges, participants assimilated the following short-term and long-term recommendations (see Tables 6 and 7). The participants were encouraged to make operational rather than conceptual recommendations. Their recommendations have been analysed and sub-divided into centre, sector and global levels as well as different areas of rehabilitation to facilitate their understanding and implementation.

Table 6: Short-term recommendations

Level	Area	Recommendation
Centre	Quality	Encourage the sharing of tools/activities linked with quality management in between the projects
		Increase awareness of RMS or other models
		Sensitise on quality concept
		Provision of sufficient quality and quantity consumable
		Quality improvement of existing rehabilitation services
		Define "clinical" quality criteria to complement the RMS
	Workflow	Think of better alternatives to improve the workflow
		Increase production
	HR/CPD	Continuous development plan to be developed for technical staff and managers
		Qualified and sufficient HR
		Should conduct continuing and upgrading training for rehabilitation staff, for better management and implementation
		Provide training and mobilisation
Centre/Sector	Quality	Quality control tools to be implemented and capitalised
	CPD	Development and education of rehabilitation HR
	Services	Strengthening professionals and equipment of rehabilitation services
		Increase coverage of services
	Training	Training of personnel (rehab) in sufficient numbers for countries that entirely lack them (initial and accredited training)
	Coordination	Rehabilitation sector: be open to users, users: mobilisation towards rehabilitation
		Integrate DPOs in advocacy

Sector	Quality	Define the "management" and "services" quality criteria for the agencies in charge of regulatory mechanisms
		Situational analysis to identify the needs of rehab services in terms of financing issues, which in turn can improve the quality of services, increase number of clients
		Develop information system for rehabilitation, in terms of production and numbers
	Policy/plan	Include rehabilitation in the health system
		Keep lobbying in order to sensitise ministries and government around rehabilitation
		Policy-level action plans
		Review plans of action according to urgent needs
		Advocate the authorities for rehab
		Lobby government to take responsibility
		Regulatory bodies for professionals need to be in place
		Work with stakeholders to make strategic documents that reflect the sectoral approach in rehab
		Increase knowledge and build leadership at ministries level
		Situational analysis of the rehab sector for future development of practical sectoral strategy
		Sensitise state actors on instruments that describe the rights of people with disabilities, such as WHO documents for example
		Sectoral approach – P&O in hospital institutes, rehab/ early intervention within PHC systems
	Services	Rehab is implemented for several community services
	Coordination	Improve coordination between DPOs and government
		Promote and enhance user/DPOs involvement
	HR	Reinforce and formalise CPD
	Financial	Ensure financial support in national budget for rehabilitation
Global	Financial	Allocate more money to studies on rehabilitation in the countries
	Coordination	Qualitative coordination
		Create communication channels between members

Table 7: Long-term recommendations

Level	Area	Recommendation
Centre	Quality	Regularly monitor and evaluate the implementation of RMS
	Services	Develop a systematic approach of the user-based approach
	HR/CPD	Strengthen capacities of the community and rehabilitation teams
Centre/ Sector	HR/CPD	Human resource education
		Guarantee specific education
Sector	Policy/plan	Include rehabilitation in the national systems
		Ensure rehabilitation is recognised by the government
		Government should pay attention to rehab services in terms of policy-making, budget, and HR development by recognising rehab services as a priority similar to disease prevention and treatment
		Policies need to be comprehensive and specifically defined
		Development of national rehabilitation plans
		Development of national policy and plan for rehabilitation
		Continue lobbying the decision-makers: authorities, donors, etc. for the recognition of rehab professionals' needs with regard to global public health issues
		Building the rehabilitation sector's capacity
		All rehabilitation actors must contribute to the implementation of strategic plans and documents
		Include rehabilitation in the public and private health systems
		Forecast future needs of people with disabilities to improve their situation
	Coordination	Promote the involvement of associations and the state in the rehabilitation sector
		Include the users in all decision-making processes related to rehabilitation
		Create synergies between actors (DPOs), service providers and control level
		Involvement of users/DPOs in all stages of this development
	Coverage	Extension of services at all levels
		Expand services
	Service delivery	Improve accessibility to services
		Use a well-defined system in regard to quality rehab services in order to ensure an objective evaluation

	Quality	Improve quality of services through government support
		Create a capitalisation committee on quality control tools and standards
		Develop monitoring and regulation systems
		Improve management systems with quality control and agreed indicators
	Education	Create physio, occupational therapy, P&O, speech therapy schools
		Rehab professionals' education
		Implement and strengthen certified education (physio, occupational therapists, P&Os level 1 and 2, speech therapists) with regard to existing needs
	HR/CPD	Reinforce capacities
		Increase number of qualified professional from all disciplines
		HR development in partnership with government
		Support HR capacity-building through education
		Build leadership
Global	HR/CPD	Continue to strengthen the lobby towards WCPT/WFOT in order to clarify the training curricula (as ISPO) taking into account the "lower" levels (assistants)

3.2 Global recommendations and conclusion

The *World Report's* rehabilitation chapter emphasises the following six key global recommendation areas to reduce barriers to rehabilitation: policy and regulatory mechanisms; financing; human resources; service delivery; technology; and research and evidence-based practice[25]. The seminar recommendations, supported by the global *World Report on Disability* rehabilitation chapter, clearly indicate a current preparedness to respond.

Following the seminar, the participants were encouraged to integrate the recommendations into their contexts and also participated in a "Challenges of sustainability of the physical rehabilitation sector" seminar seven months later, which focused upon a holistic multi-dimensional systems-level analysis of the rehabilitation sector[26]. The piloting of the RMS is ongoing and a working group regularly convenes to review and refine the tools and processes.

Though contextual challenges exist in delivering quality global rehabilitation, much progress can be achieved through improved coordination, ongoing collaboration and strengthened support "to ensure access to appropriate, timely, affordable, and high-quality rehabilitation interventions, consistent with the CRPD, for all who need them"[27].

Appendices

Glossary

Continuing professional development (CPD): the means by which people maintain their knowledge and skills related to their professional lives. It is less formal than continuing professional education (CPE), but can include formal elements; for example, a CPD plan might include CPE such as a higher degree or certification. In the health and rehabilitation sectors, it is necessary to have a qualified and updated human resource workforce.

Continuing professional education (CPE): formal education, such as a higher degree or certification, which forms part of continuing professional development.

Global rehabilitation: overall rehabilitation (see definition below) at the international level implemented in a diversity of low-, middle- and high-income contexts.

Programme: an activity that is expected to be permanent.

Project: an undertaking that is time-limited. It describes a set of actions that are carried out over a defined period of time and then terminated.

Rehabilitation: a set of measures that assist individuals who experience, or are likely to experience disability to achieve and maintain optimal functioning in interaction with their environments[28].

Rehabilitation sector: a network of people and institutions whose coordinated actions will bring about sustainable positive rehabilitation outcomes in a population. This might include people with disabilities, disabled people's organisations (DPOs), service providers, authorities and international organisations.

Acronyms and abbreviations

AT	Assistive technology
AD	Assistive devices
CPD	Continuing professional development
CPE	Continuing professional education
DPO	Disabled people's organisation
EBP	Evidence-based practice
FATO	African Federation of Orthopaedic Technicians
HI	Handicap International
HR	Human resources
HRH	Human resources for health
INGOs	International non-government organisations
ISPO	International Society for Prosthetics and Orthotics
NGO	Non-government organisation
PHC	Primary health care
P&Os	Prosthetics and orthotics, or prosthetist and orthotist
PRCs	Physical rehabilitation centres
RMS	Rehabilitation management system
TOT	Training of trainers
UN CRPD	UN Convention on the Rights of Persons with Disabilities
UNESCAP	UN Economic and Social Commission for Asia and the Pacific
WCPT	World Confederation for Physical Therapy
WFOT	World Federation of Occupational Therapy
WHO	World Health Organization
WRD	World Report on Disability

Bibliography

General

- Ad-hoc committee on a comprehensive and integral international convention on protection and promotion of the rights and dignity of persons with disabilities (2006) **Convention on the Rights of Persons with Disabilities and Optional Protocol**, New York: United Nations. http://www.un.org/disabilities/convention/conventionfull.shtml

- Fougeyrollas, Patrick et al. (1999) **Quebec Classification: Disability Creation Process**, Quebec: International Network on the Disability Creation Process (INDCP). http://www.disabilitymonitor-see.org/documents/ADVOCACY/Disability%20Creation%20Process/Disability%20Creation%20Process.doc

- Renard Patrice; Urseau Isabelle (2013) **Physical and functional rehabilitation**, Lyon: Handicap International. http://www.hiproweb.org/uploads/tx_hidrtdocs/PP10Rehabilitation.pdf

- World Health Organization (2001) **International Classification of Functioning, Disability and Health (ICF)**, Geneva: WHO. http://www.who.int/classifications/icf/en/

- World Health Organization, **Disability and Rehabilitation**, Geneva: WHO [Regularly updated]. http://www.who.int/disabilities/en/

- World Health Organization; World Bank (2011) **World Report on Disability**, Geneva: WHO. http://www.who.int/disabilities/world_report/2011/en/index.html

- World Health Organization (2013) **A66/12 Disability**, Geneva: WHO. http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_12-en.pdf

Policy analysis and development

- Amin, M et al. (2011) **EquiFrame: A Framework for Analysis of the Inclusion of Human Rights and Vulnerable Groups in Health Policies**, Health and Human Rights Journal 13(2): 1–20 pp. http://www.ncbi.nlm.nih.gov/pubmed/22957368

- Trinity College et al., **APODD – African Policy on Disability and Development** [Regularly updated]. http://global-health.tcd.ie/research/projects/APODD.php

- World Health Organization, **National Policy Documents**, Geneva: WHO [Regularly updated]. http://www.who.int/disabilities/policies/documents/en/index.html

Finance mechanisms

- Gerbier, Baptiste; Botokro, Rozenn (2009) **Improving Access to Rehabilitation Care for the Poorest; Evaluation of the 3 Equity Funds Set Up by Handicap International in Rwanda, Mali and Togo**, Lyon: Handicap International. http://www.hiproweb.org/uploads/tx_hidrtdocs/3FondsEquite-FrEng_01.pdf

- Mcintyre, Di; Mills, Anne, Eds (2012) **Research to Support Universal Coverage Reforms in Africa: The SHIELD Project**, Health Policy Plan, 27(Suppl. 1): 1–112. http://heapol.oxfordjournals.org/content/27/suppl_1.toc

Human resources development

- African Federation of Orthopaedic Technicians, **African Federation of Orthopaedic Technicians (FATO)** [Regularly updated]. http://www.fatoafrique.org/site/spip.php?article75&lang=en

- Handicap International, **Rehab Monitor** [Regularly updated]. http://www.rehabmonitor.org/

- International Society for Prosthetics and Orthotics, **International Society for Prosthetics and Orthotics** [Regularly updated]. http://www.ispoint.org/

- World Confederation for Physical Therapy, **World Confederation for Physical Therapy** [Regularly updated]. http://www.wcpt.org/

- World Federation of Occupational Therapists, **World Federation of Occupational Therapists** [Regularly updated]. http://www.wfot.org/

- World Health Organization (2009) **Guidelines for Training Personnel in Developing Countries for Prosthetic and Orthotic Services**, Geneva: WHO. http://whqlibdoc.who.int/publications/2005/9241592672.pdf

- World Health Organization (2010) **Increasing Access to Health Workers in Remote and Rural Areas through Improved Retention: Global Policy Recommendations**, Geneva: WHO. http://www.who.int/hrh/retention/guidelines/en/

- World Health Organization, **Global health workforce alliance** [Regularly updated]. http://www.who.int/workforcealliance/en/index.html

Expanding service delivery

- Chiriacescu, Diana; De Backer, Maryvonne; Botokro, Rozenn (March 2011) **Access to Services for Persons with Disabilities**, Lyon: Handicap International. http://www.handicap-international.fr/fileadmin/documents/publications/AccessToServices.pdf

- Werner, David (1999) **Disabled Village Children: A Guide for Community Health Workers, Rehabilitation Workers, and Families**, Berkeley, USA: Hesperian Foundation http://hesperian.org/books-and-resources/

- World Health Organization et al. (2010) **Community-based Rehabilitation: CBR Guidelines**, Geneva: WHO. http://www.who.int/disabilities/cbr/guidelines/en/index.html

Access to assistive technologies

- Armstrong, William et al. (2008) **Guidelines on the Provision of Manual Wheelchairs in Less Resourced Settings**, Geneva: WHO. http://www.who.int/disabilities/publications/technology/wheelchairguidelines/en/index.html

- Garton, Francesca (2012) **The Provision of Wheeled Mobility and Positioning Devices**, Lyon: Handicap International. http://www.hiproweb.org/uploads/tx_hidrtdocs/PP09WheeledMobility.pdf

- World Health Organization, **Wheelchair Service Training Package** [Regularly updated]. http://www.who.int/disabilities/technology/wheelchairpackage/en/index.html

- World Health Organization; United States Agency for International Development (USAID) (2011) **Joint Position Paper on the Provision of Mobility Devices in Less Resourced Settings: A Step Towards Implementation of the Convention on the Rights of Persons with Disabilities (CRPD) Related to Personal Mobility**, Geneva: WHO; Washington, DC: USAID. http://www.who.int/disabilities/publications/technology/jpp_final.pdf

- World Health Organization, **Assistive Devices/Technologies**, Geneva: WHO [Regularly updated]. http://www.who.int/disabilities/technology/en

Research and evidence-based practice

- Mitra, Sophie; Posarac, Aleksandra; Vick, Brandon (April 2011) **Disability and Poverty in Developing Countries: A Snapshot from the World Health Survey**, Washington, DC: The World Bank. http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Disability-DP/1109.pdf

- National Center for Health Statistics, **Washington Group on Disability Statistics**, Hyattsville, MD: National Center for Health Statistics. http://www.cdc.gov/nchs/washington_group.htm

- UN Economic and Social Commission for Asia and the Pacific (ESCAP) Social Development Division (October 2012) **Disability at a Glance 2012: Strengthening the Evidence Base in Asia and the Pacific**, **4th ed.,** Bangkok: UNESCAP. http://www.unescap.org/sdd/publications/DG2012/SDD-Disability-Glance-2012.pdf

Sustainability

- Blanchet, K; Boggs, D. (2012) **The Sustainability Analysis Process: The Case of Physical Rehabilitation**, Lyon: Handicap International. http://www.sustainingability.org/publications/guides/index.html

- Handicap International; London School of Hygiene and Tropical Medicine, **Sustaining Ability** [Regularly updated]. http://www.sustainingability.org/

- Hazard, Damien; Axelsson, Charlotte (2012) **Processes and Approaches to Enable Sustainable Access to Quality Rehabilitation Services: Comparative study of Handicap International Programmes in Albania, Kosovo and Mozambique, October 2011–May 2012**, Lyon: Handicap International. http://www.hiproweb.org/uploads/tx_hidrtdocs/SustainableAccessToQualityRehabilitationSdRs07.pdf

Seminar timetable

Quality Management of Global Rehabilitation Services
Global Experiences, Innovations and Shaping Future Reform - Ougadougou, Burkina Faso, 11-15 June 2012

Period	Monday 11 June	Tuesday 12 June		Wednesday 13 June		Thursday 14 June	Friday 15 June	
	Towards quality global rehabilitation: the situation and our current and future responses	Current situations, potential reforms		A system for managing quality global rehabilitation		A workforce for quality rehabilitation	Synthesis and recommendations	
09:00-09:15				Housekeeping, summary of previous day's outcomes				
09:15-09:30	Welcome speech: - Handicap International Burkina Faso programme Administrator - Luxembourg Embassy representative	Welcome speech: - Minister of Health of Burkina Faso		G1 Facilitated session: Exploration of the RMS (Laurence, Isabelle)	G2 Facilitated session: Exploration of the RMS (Vivath, Patrick)	A symposium for quality global rehabilitation – reforms and innovation in HRH, CPD and learning (Wes)	Reportage and workshop statement on directions for CPD (Wes)	
09:30-10:00		G1 Facilitated session: Identification of global similarities, differences, good practice and significant recent changes (Patrick, Graziella)	G2 Facilitated session: Identification of global similarities, differences, good practice and significant recent changes (Isabelle, Pierre)					
10:00-10:15	Security point in Ouagadougou (Massamba, Handicap International Burkina Faso)							
10:15-10:30	Official group photo							
10:30-11:00	Coffee break	Coffee break		Coffee break		Coffee break	Coffee break	
11:00-11:15	Presentation of AC3 programme AC3 and participants (Pierre Gallien)	Reportage (from morning session): Similarities and differences in managing global rehabilitation (Wes)		Symposium – Current practices versus global experiences and needs (Wes)		Alliances for strengthening global rehabilitation (Masse Niang)	Individual evaluation (Pierre)	
11:15-11:30	Disability World Report introduced by WHO Burkina representative					Plenary: Long-range planning, mentoring and support (Isabelle)	G1 Facilitated session: Preparing summary of workshop findings (Pierre)	G2 Facilitated session: Preparing summary of workshop findings (Pierre)
11:30-12:00	Address: Quality Global Rehabilitation (Wesley Pryor)							
12:00-12:30								

<table>
<tr><td>12:30-14:00</td><td>Lunch break</td><td>Lunch break</td><td>Lunch break</td><td colspan="2">Lunch break</td><td>Lunch break</td></tr>
<tr><td>14:00-14:30</td><td rowspan="2">Market place
- Posters and exchanges -
(Pierre)</td><td rowspan="3">Reforming Rehabilitation and Allied Health
(Rowan English)</td><td rowspan="6">Field Visit</td><td colspan="2">Workshop review: What have we learnt, and what next?
(Wes)</td><td>Collective evaluation
(Pierre)</td></tr>
<tr><td>14:30-15:00</td><td>G1
Shared visions on CPD for quality - clinical
(Wes - facilitators TBC)</td><td>G2
Shared visions on CPD for quality - management
(Wes - facilitators TBC)</td><td rowspan="2">Outline and agreement on Seminar recommendations
(Pierre, Wes, Isabelle)</td></tr>
<tr><td>15:00-15:30</td><td rowspan="2">- Current practices of clinical group: presentation of one country (selected poster)
- Current practices of managers/administrators group: presentation of one country (selected poster)
- Questions / Answers
(Pierre)</td></tr>
<tr><td>15:30-15:45</td><td>Coffee break</td><td colspan="2" rowspan="3">Cultural program</td><td>CLOSING SESSION
(with Burkina Program Director - TBC)</td></tr>
<tr><td>15:45-16:00</td><td>Coffee break</td><td rowspan="3">Practical findings:
Handicap International's Rehabilitation Management System (RMS)
(Wes)</td><td rowspan="3">Internal evaluation
(Handicap International staff only)</td></tr>
<tr><td>16:00-16:30</td><td rowspan="2">Plenary session:
Individual and common objectives for reform on rehabilitation governance
- Expectations of participants (Pierre)
- Workshop aims (Wes)</td></tr>
<tr><td>17:00-17:15</td></tr>
<tr><td>17:15-17:30</td><td>CONCLUSIONS OF THE DAY</td><td>CONCLUSIONS OF THE DAY</td><td></td></tr>
</table>

Seminar participants

	COUNTRY	STATUS	NAME		POSITION
1	Burundi	HI-Field	Mr	TYVAERT Christoph	P&O advisor
2	Burundi	Partner	Mr	MBIGANE Nestor	Directeur du Centre National d'Appareillage et de Rééducation (CNAR) de Gitega
3	Cambodia	HI-Field	Mr	CHOU Vivath	Health Technical Coordinator and Project Manager
4	Cambodia	Partner	Mr	LAO Veng	Director of Department of Welfare of Persons with Disabilities – Ministry of Social Affairs, Veterans and Youth Rehabilitation
5	Cabo Verde	Partner	Mrs	VERA-CRUZ MORAIS Maria Tereza	Responsable du Service de protection et de promotion de la santé, Ministère de la Santé
6	Cabo Verde	Partner	Mrs	CABRAL DOS SANTOS Maria Filomena	Physiotherapist, Agostinho Neto Hospital
7	China	HI-Field	Mr	DEMEY Didier	Technical advisor for rehabilitation in Tibet
8	Congo DR	HI-Field	Mrs	BWENSA NTALANI Brigitte	Chef de projet réadaptation Kinshasa
9	Congo DR	Partner	Mrs	MABENZA YUNGI Philippine	Physiotherapist, chef de l'unité de psychomotricité du département de médecine physique des CUK Kinshasa
10	India	HI-Field	Mr	SINGH Vivek Kumar	Regional Rehabilitation Project Technical Coordinator
11	Indonesia	HI-Field	Dr	BAHARI Eni Sutrisni (Mrs)	Project Manager of Physyical Rehabilitation Project of HI Indonesia
12	Indonesia	Partner	Dr	YANI Muhammad	The head of Aceh Provincial Health Office
13	Iraq	Partner	Mrs	AZIZ Naska	Deputy rehabilitation manager at the Teaching Children Rehabilitation Centre (TCRC) in Sulayamaniyah
14	Iraq	Partner	Dr	JAF Chenar Omer Ali	Rehabilitation Manager KORD
15	Iraq	Partner	Mr	MUHAMMAD Rebwar Zainadin	Executive Director-KORD
16	Mali	HI-Field	Mr	DIASSANA Victor	Chef de projet Détection Précoce
17	Mali	Partner	Mr	MAIGA Soumaila	Directeur Général Adjoint Centre National d'Appareillage Orthopédique du Mali
18	Nepal	HI-Field	Mrs	DEGREEF Laurence	Rehabilitation Technical Coordinator
19	Nepal	Partner	Mr	POKHAREL Kapil Prasad	Program Coordinator, PRERANA
20	Palestine	HI-Field	Mr	AL ZEQ Yahia	Technical Advisor in Ramallah

21	Sierra Leone and Liberia	HI-Field	Mrs	LEE Sara Joanne	Health and Physical Rehabilitation coordinator
22	Togo	HI-Field	Mr	PATSOH-AMOUZOU Yao Somanin Bruno	ENAM Project Manager
23	Viêtnam	HI-Field	Mrs	NGUYEN THI Thao	Assistant project coordinator, SCI project
24	Viêtnam	Partner	Mr	NGUYEN LUONG Bau	Director of Bac Giang Provincial Rehabilitation Center – SCI Unit, Ministry of Health
25	Australia	Expert	Mr	ENGLISH Rowan	Head, National Centre for Prosthetics and Orthotics, La Trobe University, Australia
26	Belgium	HI-HQ	Mrs	LIPPOLIS Graziella	Référent Technique Réadaptation, RBC ALAC – Responsable secteur MTQ
27	Burkina	Expert	Mr	NIANG Masse	Président Fédération Africaine des Techniciens Orthoprothésistes
28	France	HI-HQ	Mrs	URSEAU Isabelle	Head of Rehabilitation Unit
29	France	HI-HQ	Mr	GALLIEN Pierre	Head of KM Unit
30	France	HI-HQ	Mrs	MARIE Sophie	Rehabilitation Project Officer
31	Luxembourg	HI-HQ	Mr	LE FOLCALVEZ Patrick	Rehabilitation Technical advisor
32	Somaliland	Expert	Mr	JAMA HASSAN Ali	Director of Disability Action Network (Somaliland) and of the Hargeisa Rehabilitation Center
33	Thailand	HI-Field	Mr	PRYOR Wesley	Regional Rehabilitation Technical Advisor
34	Togo	HI-Field	Mrs	BOTOKRO Rozenn	Regional Rehabilitation Technical Advisor
35	Burkina	Other	Mr	TIENDREBEOGO, Ferdinand	Directeur des Hôpitaux Publics
36	Burkina	HI-Field	Mr	DIOP Massamba	Administrateur HI Burkina Faso/Niger
37	Burkina	HI-Field	Mr	CONOMBO Armand	Project manager
38	Burkina	HI-Field	Mr	BAGNOA Clément	Health and Physical Rehabilitation coordinator
39	Burkina	HI-Field	Mr	OUEDRAOGO Adama	Project Manager
40	Burkina	Other	Mr	TERNES Georges	Chef de bureau régional du MAE
41	Burkina	Other	Mr	ZONGNABA Barnabé	Agent Direction du sous-secteur Sanitaire Privé
42	Burkina	Other	Mr	TIENDREBEOGO Ferdinand	Directeur Hôpitaux publics
43	Burkina	Other	Dr	ZAN Abdoulaye	Director CNAOB
44	Burkina	Other	Mrs	SANDWIDI Adelaide	Responsable de centre de rééducation fonctionnelle Paul VI
45	Burkina	Other	Dr	OUANGO Jean-Gabriel	WHO Regional advisor
46	Burkina	Other	Mrs	BALTUSSEN Maria Marjolein	CBM Inclusive Child Development coordinator (Ghana)

Footnotes

1. World Health Organization; World Bank (2011) *World Report on Disability*, Geneva: WHO.

2. Ibid.

3. Ad-hoc committee on a comprehensive and integral international convention on protection and promotion of the rights and dignity of persons with disabilities (2006) Convention on the Rights of Persons with Disabilities and Optional Protocol, New York: United Nations.

4. World Health Organization; World Bank (2011) *World Report on Disability*, Geneva: WHO, p. 95.

5. World Health Organization; World Bank (2011) *World Report on Disability*, Geneva: WHO, p. 96.

6. Ibid. pp. 103–123.

7. URSEAU, I.; RENARD, P. (2013) *Physical and Functional Rehabilitation*, Lyon: Handicap International.

8. Ibid.

9. Handicap International seminar website [Accessed online: http://www.hiseminars.org/].

10. SKILL web [Accessed online: http://www.hiproweb.org].

11. World Health Organization (2001) International Classification of Functioning, Disability and Health (ICF), Geneva: WHO.

12. The African Federation of Orthopaedic Technicians website [Accessed online: http://www.fatoafrique.org/site/].

13. Burden of musculoskeletal diseases in the United States [Accessed online: http://www.boneandjointburden.org].

14. Gupta, N.; Castillo-Laborde, C.; Landry, M.D. (2011) Health-related rehabilitation services: assessing the global supply of and need for human resources. *BMC Health Services Research* 11: 276.

15. Ibid.

16. Riley, P.L. et al. (2012) Information systems on human resources for health: a global review. *Human Resources for Health* 10: 7.

17. Cartmill, L. et al. (2012) Using staffing ratios for workforce planning: evidence on nine allied health professions. *Human Resources for Health* 10: 2.

18. World Health Organization; World Bank (2011) *World Report on Disability*, Chapter 4 Rehabilitation, Geneva: WHO.

19. CPD is the means by which people maintain their knowledge and skills related to their professional lives. CPD is less formal than continuing professional education (CPE), but can include formal elements: for example, a CPD plan might include CPE such as a higher degree or certification. In the health and rehabilitation sectors, it is necessary to have a qualified and updated human resource workforce.

20. Rehabilitation Monitor website [Accessed online: http://www.rehabmonitor.org/index.php].

↪ 21. Ad-hoc committee on a comprehensive and integral international convention on protection and promotion of the rights and dignity of persons with disabilities (2006) Convention on the Rights of Persons with Disabilities and Optional Protocol, New York, United Nations.

↪ 22. WHO et al. (2010) CBR Guidelines: *Community-based Rehabilitation Guidelines*, Geneva: WHO.

↪ 23. Quality management of global rehabilitation services [Accessed online: http://www.hiseminars.org/seminar-quality-management-of-global-rehabilitation-service/index.html].

↪ 24. Quality management of global rehabilitation services [Accessed online: http://www.hiseminars.org/seminar-quality-management-of-global-rehabilitation-service/index.html].

↪ 25. World Health Organization; *World Bank (2011) World Report on Disability*, Chapter 4 Rehabilitation, Geneva: WHO, pp. 121–123.

↪ 26. Challenges of sustainability of the physical rehabilitation sector seminar [Accessed online: http://www.hiseminars.org/seminar-on-sustainability-of-physical-rehabilitation-sector/index.html].

↪ 27. World Health Organization; World Bank (2011) *World Report on Disability*, Chapter 4 Rehabilitation, Geneva: WHO, p. 121.

↪ 28. World Health Organization, World Bank (2011) *World Report on Disability*, Chapter 4 Rehabilitation, Geneva: WHO, p. 96.

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Quality management of global rehabilitation services

This report outlines the proceedings and discussions of Handicap International's seminar "Quality Management of Global Rehabilitation Services: Global Experiences, Innovations and Shaping Future Reform". The report closely follows the structure of the seminar week, highlighting key information, contributions, discussions and recommendations from the participants.

During the seminar week, the participants from over 12 countries shared positive and challenging rehabilitation responses and analysed the quality of services, focusing upon the management and development of the workforce. Based upon their lessons learned from rehabilitation experiences, the participants then developed short-term and long-term recommendations, to be shared widely with the aim of contributing to the enhancement of global quality rehabilitation.

Overall, this report lays out the presentations and information assimilated during the seminar that can be used as a contribution to the emerging evidence base for quality management of global rehabilitation services. It specifically mentions Handicap International's Rehabilitation Management System (RMS), which at the time of the seminar was in the pilot phase with select programmes. This methodology is available internally to Handicap International staff and partners and the results of the RMS pilot programmes were presented at the seminar. The RMS methodology will continue to be refined and developed, with updates available from Handicap International.

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